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TR17_MOUSE	TR17_HUMAN	PER1_HUMAN	MK07_HUMAN	FXJ1 HUMAN	MK07 MOUSE	SM4 F MOUSE	SPH2_HUMAN	ICP3_HSV1F	CA15_HUMAN	APG_BRANA	PSPD_MOUSE	
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## ALIGNMENTS

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EMBL; AF373846; AAK91826.1; Genew; HGNC:17755; TNFRSF13C. MIM; 606269; PROSITE; PSO0652; TNFR NGFR 1; FALSE NEG.	by non-profit institutions as long as its content is in no ified and this statement is not removed. Usage by and for commercities requires a license agreement (See http://www.isb-sib.ch/annoursend an email to license@isb-sib.ch).	This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its	resting CD4+ T-cells, in thymus and peripheral blood leukocytes!- SIMILARITY: CONTAINS 1 TNFR-CYS REPEAT.	produced by alternative spitcing.  -i- TISSUE SPECIFICITY: Highly expressed in spleen and lymph node, and in resting B-cells. Detected at lower levels in activated B-cells,	mbrane protein 1 (shown here)	-!- FUNCTION: B-cell receptor specific for TNFSF13B/TALL1/BAFF/BLyS. Promotes the survival of mature B-cells and the B-cell response.	B cell deficiency.";	<pre>Cancro M.P., Grewal I.S., Dixit V.M.; "Identification of a novel receptor for B lymphocyte stimulator that</pre>	Yan M., Brady J.R., Chan B!, Lee W.P., Hsu B., Harless S.M.,	FUNCTION. MEDLINE=21475520: PubMed=11591325:	Science 293:2108-2111(2001). [2]	; seemal amorecantom and acceleron enum observationals	C.; a newly identified TNE recent		א מ	MEDLINE=21442025; PubMed=11509692;	TISSIR-B-Cell lymphoma:	A (TEOPORNS 1 AND	NCBI TaxID=9606;	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		TVPRSF13C OR BAFFR OR BR3.	activating factor receptor, (BAFF receptor) (BAFF-R) (BLyS receptor	(Rel. 41, Last sequence update) (Rel. 41, Last annotation update)		T13C HUMAN STANDARD; PRT; 184 AA.	RESULT 1

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Best Local Similarity
Matches 184; Conserv
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15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
15-JUN-2002 (Rel. 41, Last annotation update)
16-JUN-2002 (Rel. 41, Last annotation update)
16-JUN-2002 (Rel. 41, Last annotation update)
17-JUN-2002 (Rel. 41, Last annotation update)
18-JUN-2002 (Rel. 41, Created)
18-JUN-2002 (Rel. 41, Last sequence update)
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STRAIN=BALB/C; TISSUE=B-cell lymphoma;
MEDLINE=21442025; PubMed=1159692;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOUSE
                                                                                                                         Yan M., Brady J.R., Chan B., Lee W.P., Hsu B., Harless S.M., Cancro M.P., Grewal I.S., Dixit V.M.; Cancro M.P., Grewal I.S., Dixit V.M.; If ymphocyte stimulat "Identification of a novel receptor for B lymphocyte stimulatis mutated in a mouse strain with severe B cell deficiency.",
                                                                                                                                                                                                                                                                                                                                                                              Thompson J.S., Bixler S.A., Qian F., Vora K., Scott M.L., Cachero T.G., Hession C., Schneider P., Sizing I.D., Mullen Strauch K., Zafari M., Benjamin C.D., Tschopp J., Browning
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=10090;
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Mammalia; Eutheria; Rodentia; Sciurognathi;
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BY SIMILARITY.
P -> PA (IN ISOFORM 2).
; F2BFB98099A27138 CRC64;
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TNFR-CYS (PARTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL-ANCHOR (TYPE III
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 965; DB 1
Pred. No. 1e-58;
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                                                                                                                                                                                                                                                                                                                                          receptor that specifically interacts
                                                                                                                                                                                                                                                         DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Vertebrata; Euteleostomi;
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                                                                                                                                                                     ARA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aliawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninoi P., de Bonaldo M.F.,
RA Buke J., Butt C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Hordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
                                        Query Match
Best Local Sim
Matches 101;
                                                                                                                                                               DOMAIN
REPEAT
DISULFID
DISULFID
                                                                                                                                CARBOHYD
VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -I- SUBCELLULAR LOCATION: Type III membrane protein (Probable)
-I- ALTERNATIVE PRODUCTS: 2 isoforms; 1 (shown here) and 2; are
produced by alternative splicing.
-I- TISSUE SPECIFICITY: Highly expressed in spleen and testis;
detected at lower levels in lung and thymus.
-I- DISEASE: Defects in TNFRSFI3C are a cause of severe B-cell
deficiency. B-cell deficient strain A/WySnJ has a 4.7 kb in
the BAFFR gene leading to an altered C-terminus. The
is not detectable. B-cell is much reduced.
-I- SIMILARITY: CONTAINS 1 TNFR-CYS REPEAT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=21614654; PubMed=11747827;
Harless S.M., Lentz V.M., Sah A.P., Hsu E
Hilbert D.M., Hayes C.E., Cancro M.P.;
"Competition for BLyS-mediated signaling
peripheral B lymphocyte numbers.";
Curr. Biol. 11:1986-1989(2001).
                                                                                                                                                                                                                                                                                                                               MGD;
                                                                                                                                                                                                                                                                                                                                             EMBL;
                                                                                                                                                                                                                                                                                                                                                                  EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                   entities requires a license agreement (Some send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through a collaboratic between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on it use by non-profit institutions as long as its content is in no was modified and this statement is not removed. Usage by and for commercia
                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wynshaw-Boris A
Hayashizaki Y.;
                                                                                                                                                                                                                                                          TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FUNCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                             DOMAIN
                                                                                                                                                                                                                                                                                           Alternative
                                                                                                                                                                                                                                                                                                              Receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Functional
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FUNCTION: B-cell receptor specific for TNFSF13B/TALL1/BAFF/BLyS. Promotes the survival of mature B-cells and the B-cell response.
                                                                                                                                                                                                                                                                                                                           AF373847; AAK91827.1; -.; AK008142; BAB25490.1; -.
MGI:1919299; Tnfrsf13c.
       σ
                                                         Similarity
   RSLRGRDAPAPTPCVPAECEDLLVRHCVACGLLRTPRPKPAGASSPAPRTALQPQESVGA 65
                                                                                                                                                                                                                                                 amune .
e splicing.
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92
                                                                                                                                                                                                                                                                                                              Immune response;
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                                        Conservative
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                                                                                                                 18798
                                                     42.5%;
56.1%;
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                                                                                                                                                                                                                                                                                                              Signal-anchor; Transmembrane;
                                          9
                                        Pred. No. 1.96
); Mismatches
                                                                          Score
                                                                                                                              N-LINKED (GLCNAC. . MISSING (IN ISOFORM
                                                                                                                                                                 CYTOPLASMIC (POTENTIAL)
TWER-CYS (PARTIAL)
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                       SIGNAL-ANCHOR (POTENTIAL).
                                                                                                                                                                                                                                                                             EXTRACELLULAR
                                                                                                                 28BC7C1A02FB87EF CRC64;
                                                         410.5; DB 1
No. 1.9e-21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Heu B.L.,
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                                                                                                                                                                                                                                                        (POTENTIAL)
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                                                                             175;
                                                                                                                                                                                                                                                                                                            Glycoprotein,
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                                          15;
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                                          Gaps
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RSQRSRDSSVPTQCNQTECFDPLVRNCVSCELFHT--PDTGHTSSLEPGTALQPQE----

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RESULT 3
XP2_XENLA
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                                                                                                                                                 EMBL; M90095; AAA50001.1; -.
EMBL; X51394; CAA35759.1; ALT_FRAME.
PIR; S07498; SKXLAG.
PIR; A37331; A37331.
HSSP; P04155; 1PS2.
InterPro; IPR000519; P_trefoil.
Pfam; PF00088; trefoil; 2.
          CHAIN
MOD_RES
DOMAIN
DOMAIN
                                                                       Signal;
SIGNAL
                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collab between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for comentities requires a license agreement (See http://www.isb-sib.ch/an or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gmachl M., Berger H., Thalhammer J., Kreil G.;
"Dermal glands of Xenopus laevis contain a polypeptide with a
"repetitive amino acid sequence.";
FEBS Lett. 260:145-148(1990)
-i- FUNCTION: MAY ACT AS A GROWTH FACTOR IN THE GERMINAL LAYER
EPIDERMIS. MAY ALSO BE INVOLVED IN GROWTH OF REGENERATING
AND IN PROTECTION OF THE SKIN FROM THE EXTERNAL ENVIRONMEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         J. Biol. [2]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   XP2_XENLA STANDARD; PRT; 439 AA.
P17437; Q08944;
01-AUG-1990 (Rel. 15, Created)
01-FEB-1995 (Rel. 31, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Skin secretory protein XP2 precursor (APEG protein).
Xenopus laevis (African clawed frog).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Xenopos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hauser F., Roeben C., Hoffmann W.;
"XP2, a new member of the P-domain peptide family
factors, is synthesized in Xenopus laevis skin.";
J. Biol. Chem. 267:14451-14455(1992)
                                                                                                                     PRINTS; PR00680; P;
SMART; SM00018; P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=90127399; PubMed=2298293;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE=Skin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 3-439 FROM N.A. (ISOFORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 1-25 AND 344-439 FROM N.A. MEDLINE=92332564; PubMed=1629230;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=8355;
                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE SPECIFICITY: SKIN.
SIMILARITY: CONTAINS 2 P-TYPE (TREFOIL) DOMAINS.
CAUTION: REF.2 SEQUENCE DIFFERS FROM THAT SHOWN FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUBCELLULAR LOCATION: Secreted.
ALTERNATIVE PRODUCTS: 2 isoforms; 1/APEG (shown are produced by alternative splicing.
                                                                                                                                                                                                                                                                                                                                                                                                              ONWARD AND IS SHORTER (418 AA) DUE TO A FRAMESHIFT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               63
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                                                                                      Growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QESLENVFVPSSETPHASAPTWPPLKEDADSALPRHSVPVPATELGSTELVTTKTAGPEQ
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23
26
350
        n factor;
1 22
23 439
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23 23
26 343
50 391
                                                                                                                                     PTREFOIL.
                                                                                                       TREFOIL;
                                                                                     Alternative splicing;
POTENTIAL.

SKIN SECRETORY PROTEIN XP2.

PYRROLLDOME CARBOXYLIC ACID (PROBABLE)

33 X REPEATS OF G-[GE]-[AP](2,4)-A-E.

P-TYPE 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>:</u>
                                                                                                                                                                                                                                                                                               (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OR IN THE GERMINAL LAYER OF THE GROWTH OF REGENERATING GLANDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISOFORM
                                                                                     Amphibian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2)
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RA Deloukas P., Matthews L.H., Ashurst J., Burton J., Gilbert J.G.R., And Deloukas P., Matthews G., Almeida J.P., Babbage A.K., Bagguley C.L., RA Bailey J., Barlow K.F., Bates K.N., Beard L.M., Beare D.M., Bailey J., Barlow K.F., Bates K.N., Beard L.M., Beare D.M., Bailey O.P., Bird C.P., Blakey S.E., Bridgeman A.M., Brown A.J., RA Beasley O.P., Bird C.P., Blakey S.E., Bridgeman A.M., Brown A.J., RA Buck D., Burrill W.D., Butler A.P., Carder C., Carter N.P., Clee C.M., Clark G.V., Clae C.M., Clapman J.C., Clamp M., Clark G., Clark L.N., Clark S.V., Clee C.M., RA Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R., Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R., RA Collson A.G., Frankland J.A., Fraser A., French L., Garner P., RA Ellington A.G., Frankland J.A., Fraser A., French L., Garner P., RA Ellington A.G., Frankland J.A., Fraser A., French L., Howden P.J., RA Humtond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J., RA Huckle B., Hunt A.R., Hunt S.E., Jekosch K., Johnson C.M., Johnson D., RA Huckle B., Hunt A.R., Hunt S.E., Jekosch K., Johnson C.M., Johnson D., RA Huckle B., Hunt A.R., Lioyd C., Lloyd D.M., Lovell J.D., Albard J.L., Martin S.L., McConnachie L.J., McLay K., McMurray A.A., Liyd Change M.J., Lovell J.D., Marsh V.L., Martin S.L., McConnachie L.J., McLay K., McMurray A.A., Minter S.A., Mistry D., Moore M.J.F., Mallikin J.C., Nickerson T., RA Milne: S.A., Mistry D., Moore M.J.F., Mallikin J.C., Nickerson T., RA Phillimore B.J.C.T., Prathalingam S.R., Plumb R.W., Ramsay H., RA Rice C.M., Ross M.T., Scottl C.E., Sehra H.K., Shownkeen R., Sims S.,
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Best Local S
Matches 46
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last |sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Transcription initiation factor TFIID 135 kDa
(TAFII135) (TAFII-130) (TAFII130).
TAF4 OR TAF4A OR TAF2C1 OR TAF2C OR TAFII135 (Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  T2D3_HUMAN STANDARD; P
000268; Q99721; Q9BX42; Q9BX40;
15-JUL-1998 (Rel. 36, Created)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
MEDLINE=21638749; PubMed=11780052;
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27.5%;
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BY SIMILARITY.

MISSING (IN REF. 2).

C -> W (IN REF. 2).
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0; Mismatches
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Pred. No. 0.
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                                                                                                                                                                                                                                                                                                                                                                                                                                  activation by the AF-2s hormone receptors in
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-!- FUNCTION: MAKES PART OF TRID IS A MULTIMERIC PROTEIN COMPLEX THAT PLAYS A CENTRAL ROLE IN MEDIATING PROMOTER RESPONSES TO VARIOUS ACTIVATORS AND REPRESSORS. POTENTIATES TRANSCRIPTIONAL ACTIVATION BY THE AF-2S OF THE RETINOIC ACID, VITAMIN D3 AND THYROID HORMONE.
-!- SUBUNIT: TRID IS COMPOSED OF TATA BINDING PROTEIN (TBP) AND A NUMBER OF TBF-ASSOCIATED FACTORS (TAFS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; U75308; AAC50901.1;
TRANSFAC; T02328; -.
Genew; HGNC:11537; TAF4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; AL137077; CAC36006.1; -. EMBL; AL109911; CAC22312.2; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rogers J.;
"The DNA sequence and comparative Nature 414:865-871(2001).
                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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                     GLALVLALVLVGLVSWRRRQRRLRGASSAEAFDGDKDAFEFLDKVIILSFGISDATAFAW
                                                                   KPAGPAALAARAGPGPGPGPGPGPGPGKPAGPGAAQTLNGSAALLNSHHAAAPAVSLVNN
                                                                                                             SPAPRTALQPQESVGAGAGEAALPLPG
                                                                                                                                                                                                    RRGPRSLRGRDAPAPTPCVPA------ECFDLLVRHCVACGLLRTPRPKPAGAS
                                                                                                                                                          RPGPPSPRRPLVPA-GPAPPAAKLRPPPEGSAGACAPVPAAAAVAAG----PEPAPAGPA
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G -> GP
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POLY-ALA.
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D.R., Beck S.,
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Pfam; PF00097; zf-C3HC4; 1.
SMART; SM00184; RING; 1.
SMOSITE; PS00518; ZF RING_1; 1.
PROSITE; PS50089; ZF_RING_2; 1.
Transcription regulation; Trans-acting fa DNA-binding; Early protein; Repressor; Ph ZN_FING_13

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RING-TYPE.
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DOMAIN
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P29128;
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Wirth U.V., Fraefel C., Vogt
"Immediate-early RNA 2.9 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; AJ004801; CAA00
PIR; B38209; EDBE23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             entities requires a license agreement (S or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
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                                                                                                                                                                                                                                                              62;
                                                                                                                                                                                                                                                                                    Similarity
                                        SWRRRORRL-RGASSAEAPDGDKDAPEPLDKVIILSPGISDATA-PAWPPPGEDPGTTPP
                                                                                                                                                                          STRGRQTPAVQPAPRS-----LARR--PCGRAAAVSAPPSSRSRGGRRDPRLPAAPRAAP
                                                                                                                                                                                                                   SLRGRDAPAPTPCVPAECFDLLVRHCVACG------
ARRRRTELDRAPTPAPAP
                                                                                   AAQARACSPEPR----EEGRGAGLGVAAGETAGWGAGSEEGRGERRARLLGEAGPPRVQ
                                                                                                                            AG---ASSPAPRTALQPQESVGAGAGEAALPLPGLLFGAPALLGLALVLALVLVG---LV
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THE STRONGLY ACIDIC REGION MIGHT ATION DOMAIN, POSSIBLY REGULATED
                                                                                                                                                                                                                                                                                                                                                  284
676 AA;
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(Rel. 24, Last sequence up
(Rel. 40, Last annotation
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el C., Vogt B., Vlcek C.,
RNA 2.9 and early RNA 2.6
                                                                                                                                                                                                                                                                                                                                           331
; 67879 MW;
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o RNA stage;
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Pred. No. 0.38
L3; Mismatches
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; 11B06BA4E5C4EB71 CRC64;
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  -APAPAPISTVIDLT---ANAPARPADPAPAAAPGPASA
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                                                                                                                                                                                                                                                                                                                                                                                                               Phosphorylation.
                                                                                                                                                                                                                                                                                                                                                                                                                                      factor; Activator;
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                                                                                                                                                                                                                                                                                                    DB 1;
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herpesvirus
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01-OCT-1996
16-OCT-2001
                                                                                                                                                                                Brown S.A., Schibler U.;

"The ine and outs of circadian timekeeping.";

"Curr. Opin. Genet. Dev. 9:588-594(1999).

ITHE STANSCRIPTIONAL ACTIVATOR RECOGNIZES AND BINDS TO THE SEQUENCE 5'-RITAYGTAAY-3' FOUND IN THE PROMOTER OF GENES SUCH AS ALBUMIN, CYP2A4 AND CYP2A5. IT IS NOT ESSENTIAL FOR CIRCADIAN RHYTHM GENERATION, BUT MODULATES IMPORTANT CLOCK OUTPUT GENES. MAY BE A DIRECT TARGET FOR REGULATION BY THE CIRCADIAN PACEMAKER COMPONENT CLOCK, MAY AFFECT CIRCADIAN PERIOD AND SLEEP REGULATION.

-I- SUBUNIT: BINDS DNA AS A HOMODIMER OR A HETERODIMER. CAN FORM A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nyunoya H.
Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               epecific for the tax-responsive enhancer of Gene 126:251-255(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nyunoya H., Morita T., Shimotohno K.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shutler G., Glassco T., Kang X., Korneluk R., Mueller C.R.; "Genomic structure of the human D-site binding protein (DBP) gene."; Genomics 34:334-339(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE=96374825; PubMed=8786133;
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Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Yu W., Andersson B., Worley K.C., Muzny D.M., Ricafrente J.Y., Wentland M.A., Lennon G., Gi "Large-scale concatenation cDNA sequencing.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q10586;
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MEDLINE=97264341; PubMed=9110174;
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MEDLINE=95137580; PubMed=7835883;
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                                            A STRONG CIRCADIAN RHYTHMICITY. SIMILARITY: BELONGS TO THE BZIP FAMILY.
                                                                                             HETERODIMER WITH TEF.
SUBCELLULAR LOCATION: Nuclear.
TISSUE SPECIFICITY: UBLQUITOUSLY
SUPRACHIASMATIC NUCLEI (SCN) AND
SWISS-PROT entry
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(Rel. 34, Last sequence update)
(Rel. 40, Last annotation update)
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cDNA cloning of the
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Catarrhini;
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of HTLV-I.";
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Gibbs R.A.;
                                                 PAR SUBFAMILY
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Best Local S
Matches 56
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CONFLICT
CONFLICT
SEQUENCE
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01-FEB-1996 (Rel. 33, Created,
01-FEB-1996 (Rel. 33, Last sequence update)
01-FEB-1996 (Rel. 33, Last annotation update)
01-FEB-1996 (Rel. 33, Last annotation update)
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P48634;
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                                  Banerji J., Sands J., Strominger J.L., Spies T.;
"A gene pair from the human major histocompatibility
large proline-rich proteins with multiple repeated mc
single ubiquitin-like domain.";
proc. Natl. Acad. Sci. U.S.A. 87:2374-2378(1990).
                                                                                                                                                                                                                                                                                                          HUMAN
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EMBL; U48213; AAB18668.1; -!
EMBL; U48212; AAB18668.1; JOINED.
EMBL; U79283; AAB50219.1; -.
EMBL; D28468; BAA05833.1; -.
                                                                                                                                                                      Eukaryota; Metazoa; Chordața; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primatės; Catarrhini; Hominidae; Homo.
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MEDLINE=93272029; PubMed=8499947;
            SEQUENCE OF 1-1860 FROM N.A.
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Cohen D. Perrot

.J.М.,

.J.M., Bougueleret L., Prieur S., Caterina D., Pr. V., Jurka J., Rodriguez-Tome P., Claverie J.-M.,

Primas G., 1., Dausset

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EMBL; M33518; AAA35586.1; -
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EMBL; Z15025; CAA78744.1; -
PIR; B35098; B35098.
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                                                                                                                                                                                                                                                     SEQUENCE
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J. Biol. Chem. 270:4544-4550(1995).

-i- FUNCTION: SEQUENCE-SPECIFIC TRANSCRIPTION FACTOR WHICH IS E

A DEVELOPMENTAL REGULATORY SYSTEM THAT PROVIDES CELLS WITH

A DEVELOPMENTAL REGULATORY SYSTEM THE ANTERIOR-POSTERIOR AI
                                                                                                                                                                                                                                                                                                            SEQUENCE OF 1-42 FROM N.A.

MEDLINE=95181447; PubMed=7876223;

Vieille-Grosjean I., Huber P.;

"Transcription factor GATA-1 regulates human HOXB2 gene expression erythroid cells.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Giampaolo A., Acampora D., Zappavigna V., Pannese M., D'Esposito M., Care A., Faiella A., Stornaiuolo A., Russo G., Simeone A., Boncinelli E., Peschle C.; "Differential expression of human HOX-2 genes along the anterior-posterior axis in embryonic central nervous system."; Differentiation 40:191-197(1989).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kongsuwan K., Webb E., Housiaux P., Adams J.M.; "Expression of multiple homeobox genes within d haemopoietic lineages."; EMBO J. 7:2131-2138(1988).
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Gaudino G., Stornaiuolo A., Cafiero M., Faiella A., Si
"Organization of human class I homeobox genes.";
Genome 31:745-756(1989).
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MEDLINE=90098876; PubMed=2574852;
Acampora D. D'Esposito M., Faiella A., 1
Morelli F., Stornaluolo A., Nigro V., Sir
"The human HOX gene family.";
Nucleic Acids Res. 17:10385-10402(1989).
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Mammalia; Eutheria;
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MEDLINE=88329001; PubMed=2901346;
Kongsuwan K., Webb E., Housiaux P.,
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SIMILARITY: BELONGS TO THE ANTP HO
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Primates;
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                                                                                                   ANTP HOMEOBOX FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             V., Simeone
                                                                                                                                                       MHOLE
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Boncinelli E.;
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                      a collaboration
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RESULT 9
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Best Local
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HSSP; P14653; IB72.
TRANSFAC; T03323; -.
Genew; HGNC:5113; HOXB2.
MIM; 142967; -.
                                                                                                                                                                         WASL_BOVIN
095107;
16-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA BIND
CONFLICT
SEQUENCE
MEDLINE=97050838; PubMed=8895577;
Miki H., Miura K., Takenawa T.;
                       SEQUENCE FROM N.A.
TISSUE=Brain;
                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea Bovidae; Bovinae; Bos.
                                                                                                                          WASL.
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EMBL; X16176; CAA34298.1; --
EMBL; X16371; CAA32709.1; --
EMBL; X78978; CAA55581.1; --
EMBL; X78978; CAA55581.1; --
EMBL; X78978; CAA55581.1; --
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use by non-profit institutions as lo
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entities requires a license agreement (
or send an email to license@isb-sib.ch)
                                                                                                             Bos taurus
                                                                                                                                      Neural Wiskott-Aldrich
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PRINTS; PR00024; HOMEOBOX.
PRODOm; PD000010; Homeobox; 1.
                                                                                                                                                   16-OCT-2001
15-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE; PS00027; HOMEOBOX 1; 1.
PROSITE; PS00032; ANTENNAPĒDIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SMART; SM00389;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 iomeobox;
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InterPro; IPR001356; Homeobox.
                                                         _TaxID=9913;
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                                                                       Bovinae;
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                                                                                                                                                                                                                                                                                       LSPGISDATAPAW----PP---
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                                                                                                                                                                                                                                                                                                                                                                                                                  PRSQKRAEDGPALPPPPPPPLPA--
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA-binding; Developmental protein; Nuclear protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  143
136
356 AA;
                                                                                                             (Bovine).
                                                                                                                         (Rel. 40, Createq)
(Rel. 40, Last sequence update)
(Rel. 41, Last annotation update)
(Rel. 41, Mast annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score
Pred.
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D7ACA0E3D5BEBFB9 CRC64;
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                                                                                                                                                                                                  PRT;
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No. 0.9
                                                                                   Ruminantia; Pecora; Bovoidea;
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RESULT 1.
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ID ICPO HSVBK
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Best Local S
Matches 41
                                                                      01-APR-1993
01-APR-1993
16-OCT-2001
                                                                                                                                                                                                                                                                                                                                                DOMAIN
DOMAIN
DOMAIN
DOMAIN
SEQUENCE
    Bovine herpesvirus type 1 (strain K22).
Viruses; dsDNA viruses, no RNA stage; H
Alphaherpesvirinae; Varicellovirus.
                                       BICPO.
                                                           Trans-acting
                                                                                                                                                                                                                                                                                                                                                                                                                                              SMART; SM00285; PBD; 1.
SMART; SM00461; WH1; 1.
SMART; SM00246; WH2; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam; PF00568; WH1; 1.
Pfam; PF00786; PBD; 1.
Pfam; PF002205; WH2; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified and this statement is not removed. entities requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collable between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tyrosine kinases.";
EMBO J. 15:5326-5335(1996).
                                                                                                                                                                                                                                                                                                                                                                                                        DOMAIN
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                                                   2.9/ER2.6).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUBUNIT: BINDS ACTIN AND ARP2/3 COMBINDS TO SH3 DOMAINS OF ASH/GRB2.
SIMILARITY: CONTAINS 1 CRIB DOMAIN.
SIMILARITY: CONTAINS 1 WH1 DOMAIN.
SIMILARITY: CONTAINS 2 WH2 DOMAINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FUNCTION:
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                                                                                                                                                                       PPPPPPPL----SVSGSVAPPPPPPPPPPPPPPPPGLPSDGDHQVPTPA
                                                                                                                                                                                           DKDAPEPLDKVIILSPGISDATAPAWPPPGEDPGTTPP---
                                                                                                                                                                                                                 -------PLPAL---
                                                                                                                                                                                                                                                            PPPARGRGAPPPPPSRAPTAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a novel actin-depolymerizing protein,
                                                                                                                                                                                                                                     QESVGAGAGEAALPLPGLLFGAPALLGLALVLALVLVGLVSWRRRQRRLRGASSAEAPDG
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IPR000697; RanBP1_WASP.
IPR001960; WH1.
IPR003124; WH2.
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203
277
405
433
486
                                                                       (Rel.
(Rel.
(Rel.
                                                                                                                                                                                                                                                                                                      Conservative
                                                          (Rel. 25, Last sequence update)
(Rel. 40, Last annotation update)
transcriptional protein ICPO (P135
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                                                                                                                 STANDARD;
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25,
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216
392
422
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505
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                                                                                                                                                                                                                                                                                                                                                           WH2 1.
WH2 2.
ASP-RICH.
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CRIB.
PRO-RICH.
WH2 1.
                                                                                                                 PRT;
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PROTEIN 2/3 (ARP2/3)
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Herpesviridae;

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AREA_PENCH
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Matches 60
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InterPro; IPRO01841; Znf_ring.

Pfam; PF00097; Zf-C3HC4; 1.

SMART; SM00184; RING; 1.

PROSITE; PS00518; ZF RING_1; 1.

PROSITE; PS0089; ZF-RING_2; 1.

PROSITE; PS50089; ZF-RING_2; 1.

Transcription regulation; Trans-acting factor of the control of the con
                                                                                                                                                                                                                                       Q01582;
01-NOV-1997
01-NOV-1997
15-JUN-2002
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J. Virol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
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MEDLINE-92219360; PubMed=1313901;
MITTH U.V., Fraefel C., Vogt B., Vlcek C., Paces V., Schwyzer M.;
MITTH With U.V., Fraefel C., Vogt B., Vlcek C., Paces V., Schwyzer M.;
"Immediate-early RNA 2.9 and early RNA 2.6 of bovine herpesvirus 1
"Immediate-early RNA 2.9 and early RNA 2.6 of inger transactivator
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
MEDLINE=95308537; PubMed=7788718;
                                                                                                        Eukaryota; Fungī; Āscomycota;
Eurotiales; Trichocomaceae; mi
                                                                                                                                                                                                                 Nitrogen
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HSSP; P28990; 1CHC.
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                        SEQUENCE FROM N.A.
                                                                          NCBI_TaxID=5076;
                                                                                                                                                       Penicillium chrysogenum.
                                                                                                                                                                                                                                                                                                                                                   AREA
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PTM: THE STRONGLY ACIDIC REGION MIGHT
ACTIVATION DOWAIN, POSSIBLY REGULATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CASEIN KINASE II
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SWRRRQRRL-RGASSAEAPDGDKDAPEPLDKVIILSPGISDATA-PAWPPPGEDPGTTPP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQARACSPEPR-----EEGRGAGLGVAAGETAGWGVGSEEGRGERRAKLLGEAGPPRVQ
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                                                                                                                                                                                                               regulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GHSVPVPATELGSTELVTTKTAGP 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AG---ASSPAPRTALQPQESVGAGAGEAALPLPGLLFGAPALLGLALVLALVLVG---LV
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676 AA;
                                                                                                                                                                                           (Rel. 35, Created)
(Rel. 35, Last sequence update)
(Rel. 41, Last annotation update)
nulatory protein areA (Nitrogen regulator nre)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                   STANDARD;
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                                                                                                      a; Pezizomycotina; Eurotiomy
mitosporic Trichocomaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 102.5; D
Pred. No. 3.3;
14; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ASP/GLU-RICH (ACIDIC)
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                                                                                                                               Eurotiomycetes;
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                                                                                                        Penicillium
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RESULT 12
YQ35 CAEEL
ID YQ35 C
AC 009456
DT 01-NOV
DT 01-NOV
DT 01-NOV
DT 01-NOV
DT CAENOX
OC ENABD41
OX NCB1 T
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RN SEQUEN
RC STRAIN
RA Palmes
RC STRAIN
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Best Local S
Matches 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YQ35 CAEEL
Q09456;
                                                    Palmer S.;

Submitted (NOV-1994) to the EMBL/GenBank/DDBJ databases.

Submitted (NOV-1994) to the EMBL/GenBank/DDBJ databases.

FUNCTION: NEMATODE CUTICLES ARE COMPOSED LARGELY OF COLLAGEN-LIKE PROTEINS. THE CUTICLE FUNCTIONS BOTH AS AN EXOSKELETON AND AS A BARRIER TO PROTECT THE WORM FROM ITS ENVIRONMENT (BY SIMILARITY).

SUBUNIT: COLLAGEN POLYPEPTIDE CHAINS ARE COMPLEXED WITHIN THE CUTICLE BY DISULFIDE BONDS AND OTHER TYPES OF COVALENT CROSS-LINKS (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Interpro; IPR000679; Znf_GATA.

Pfam; PF00320; GATA; 1.

PRINTS; PR00320; GATAZIPINGER.

SMART; SM00401; Znf_GATAZIPINGER.

SMART; SM00401; Znf_GATA, 1.

PROSITE; PS00344; GATA_ZN_FINGER_1; 1.

PROSITE; PS00344; GATA_ZN_FINGER_2; 1.

Transcription regulation; Activator; DNA-binding; Zinc-finger;

Nuclear protein; Nitrate assimilation.

Nuclear protein; Nitrate assimilation.

SN_FING_S25_549_GATA_TYPE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Haas H., Bauer B., Redl B., Stoeffler G., Marzluf G.A.;
"Molecular cloning and analysis of nre, the major nitrogen regulatory
gene of Penicillium chrysogenum.";
Curr. Genet. 27:150-158(1995).
                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
STRAIN=Bristol N2;
                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=6239;
                                                                                                                                                                                                                                                                                                                                                                                                                              Caenorhabditis elegans.
Eukaryota; Metazoa; Nemato
Rhabditidae; Peloderinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C09G5.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01.NOV-1997 (Rel. 35, Created)
01.NOV-1997 (Rel. 35, Last sequence update)
01.NOV-1997 (Rel. 35, Last annotation update)
Putative cuticle collagen C09G5.5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; U02612; AAA83400.1; -. HSSP; P17429; 4GAT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entities requires a license agreement (See http://www.isb-sib.ch/announce, or send an email to license@isb-sib.ch).
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        This SWISS-PROT
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-i- SIMILARITY: CONTAINS 1 GATA-TYPE ZINC FINGER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     - ! - FUNCTION: MAJOR NITROGEN REGULATORY PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            909
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     entry
                                                                                                                                                                                                                                                                                                                                                                                                                                 Nematoda; Chromadorea; cinae; Caenorhabditis.
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Pred. No. 3.5;
13; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
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                                                                                                                                                                                                                              SEQUENCE FROM N.A. STRAIN=129/Sv; TIS
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30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                         Q60925;
15-JUL-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for con
                                                                                                                                                                                                                                                          NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                               D-site-binding
                                                                                                                                                                                                                                                                                                                                                                                                                       DBP MOUSE
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                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse)
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InterPro; IPR002486; Col_cuticle_N.
InterPro; IPR000087; Collagen.
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                                                                                                    ALN=129/07; 1200011 H., Gonzalez F.J.;
Y.H., Oguchi H., Gonzalez F.J.;
nitted (JUN-1995) to the EMBL/GenBank/DDBJ databases.
FUNCTION: THIS TRANSCRIPTIONAL ACTIVATOR RECOGNIZES AND BINDS TO THE SEQUENCE 5'-RTTAYGTAAY-3' FOUND IN THE PROMOTER OF GENES SUCH AS ALBUMIN, CYP2A4 AND CYP2A5. IT IS NOT ESSENTIAL FOR CIRCADIAN RHYTHM GENERATION, BUT MODULATES IMPORTANT CLOCK OUTPUT GENES. MAY BE A DIRECT TARGET FOR REGULATION BY THE CIRCADIAN PACEMAKER

BE A DIRECT TARGET FOR REGULATION BY THE CIRCADIAN PACEMAKER

COMMONDARY CLOCK. MAY AFFECT CIRCADIAN PERIOD AND SLEEP REGULATION
                                                    SUBUNIT: BINDS DNA AS A HOMODIMER OR A HETERODIMER. CAN HETERODIMER WITH TEF (BY SIMILARITY).
SUBCELLULAR LOCATION: Nuclear.
             TISSUE SPECIFICITY: EXPRESSED IN AND IN MOST PERIPHERAL TISSUES, IN RHYTHMICITY.
                                                                                                 (BY SIMILARITY)
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317 AA;
                                                                                                                                                                                                                                                                                                                                                           (Rel. 36, Created)
(Rel. 36, Last sequence update)
(Rel. 39, Last annotation updat
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137
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BELONGS
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31283 MW;
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Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          license agreement (See http://www.isb-sib.ch/announce/
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                        PRESSED IN THE SUPRACHIASMATIC NUCLEI TISSUES, WITH A STRONG CIRCADIAN
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TRIPLE-HELICAL REGION.
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Pred. No. 1
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BZIP FAMILY.
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RESULT 1
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Best Local S
Matches 54
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P16443;
                                                                             REVISIONS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                01-AUG-1990 (Rel. 15, Created)
01-AUG-1991 (Rel. 19, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
D-site-binding protein (Albumin D box-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collable between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions
                                                            Cell
                                                                                                                                                                                                   STRAIN=Wistar; TISSUB=Liver;
MEDLINE=90235277; PubMed=231750;
Mueller C.R., Maire P., Schibler
"DBP, a liver-enriched transcript
                                                                                                                                                                                                                                                                                                            NCBI_TaxID=10116;
[1]
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Mammalia; Eutheria; Rodentia;
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                                                                                                                                           posttranscriptionally.";
Cell 61:279-291(1990).
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MEDLINE=99439627; PubMed=10508692;
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                                                          ler C.R., Maire P
65:915-915(1991)
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BASIC MOTIF.
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Pred. No. 1
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RESULT 15
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                                               7 HUMAN STANDARD; PRT; 503 AA. Q92985; 000331; 000332; 000333; 075924; 01-NOV-1997 (Rel. 35, Created) 16-OCT-2001 (Rel. 40, Last annotation update) Interferon regulatory factor 7 (IRF-7).
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"The ins and outs of circadian timekeeping.";

Curr. Opin. Genet. Dev. 9:588-594(1999).

-i- FUNCTION: THIS TRANSCRIPTIONAL ACTIVATOR RECOGNIZES AND BINDS TO THE SEQUENCE 5'-RTTAYGTAAY-3' FOUND IN THE PROMOTER OF GENES SUCH AS ALBUMIN, CYP2A4 AND CYP2A5. IT IS NOT ESSENTIAL FOR CIRCADIAN RHYTHM GENERATION, BUT MODULATES IMPORTANT CLOCK OUTPUT GENES. MAY BE A DIRECT TARGET FOR REGULATION BY THE CIRCADIAN PACEMAKER COMPONENT CLOCK. MAY AFFECT CIRCADIAN PERIOD AND SLEEP REGULATION (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA_BIND
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; J03179; AAA41083.1;
PIR; A34894; A34894
PIR; A39531; A39531.
TRANSFAC; T00183; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA-binding; Transcription regulation; Activator; Nuclear protein; Biological rhythms.

DOMAIN 129 135 POLY-PRO.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUBUNIT: BINDS DNA AS A HOMODIMER OR A HETERODIMER. CAN HETERODIMER WITH TEF.
SUBCELLULAR LOCATION: Nuclear.
TISSUE SPECIFICITY: EXPRESSED IN THE SUBRACHIASMATIC NUCLEAR SUBCLIPICITY: EXPRESSED IN THE SUBRACHIASMATIC NUCLEAR SUBJECT OF THE SUBPACHIASMATIC NUCLEAR SUBJECT OF THE SUBPACHIASMATIC NUCLEAR SUBJECT OF THE SUB
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sąpiens (Human)
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                                                                                                                                                                                                                                                                                                                            RHRFSEEELKPOPIMKKARKVOVPEEO 253
                                                                                                                                                                                                                                                                                                                                                                           TELGSTELV-----TTKTAGPEQQ 184
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PRO-RICH (PROLINE/ACIDIC REGION BASIC MOTIF.
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A STRONG CIRCADIAN
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EMBL; U73036; AAB17190.1; -.
EMBL; U53830; AAB80688.1; -.
EMBL; U53831; AAB80688.1; -.
EMBL; U53832; AAB80690.1; -.
EMBL; AF076494; AAC70999.1; -.
HSSP; P23906; 2IRF.
                                                         VARSPLIC
VARSPLIC
CONFLICT
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             J. BIO1. Chem. 273:29210-29217 (1998).

-: FUNCTION: TRANSCRIPTIONAL ACTIVATOR. BINDS TO THE INTERFERON-
-: STIMULATED RESPONSE ELEMENT (ISRE) IN IFN PROMOTERS AND IN THE Q
PROMOTER (QP) OF EBV NUCLEAR ANTIGEN-1 (EBNA1).

-:- SUBCELLULAR LOCATION: Nuclear (Potential).

-:- ALTERNATIVE PRODUCTS: 4 ISOFORNS; A (SHOWN HERE), B/BETA, C/GANMA
-- AND D/H, ARE PRODUCED BY ALTERNATIVE SPLICING.
-- AND D/H, ARE PRODUCED BY ALTERNATIVE SPLICING.
-- TISSUE SPECIFICITY: EXPRESSED PREDOMINANTLY IN SPLEEN, THYMUS, AND
PERIPHERAL BLOOD LEUKOCYTES.
                                                                                                                                                                                                                                                       PRINTS; PR00267; INTFRNREGFCT.
ProDom; PD002355; IRF; 1.
SMART; SM00348; IRF; 1.
                                                                                                                                                                                                                                                                                                                                  MIM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collable between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Au W.-C., Moore P.A., Laffeur D.W., "Characterization of the interferon potential role in the transcription
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Zhang L., Pagano J.S.;
"IRF-7, a new interferon regulatory factor
Barr virus latency.";
Mol. Cell. Biol. 17:5748-5757(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Grossman A., Nicholl J., Antonio L., Luethy R. Sutherland G.R., Mak T.W.;
Submitted (OCT-1996) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                    VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PERIPHERAL BLOOD LEUKOCYTES.
-!- SIMILARITY: BELONGS TO THE IRF FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. (ISOFORM D). MEDLINE=99003279; PubMed=9786932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. (ISOFORMS A; B MEDLINE=97459673; PubMed=9315633;
                                                                                                                                                                                               Alternative
DNA_BIND
                                                                                                                                                                                                                            Transcription regulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              entities requires a license agreement (See http://www.isb-sib.ch/announce/
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                                                                                                                                                                                 /ARSPLIC
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            10.3%;
29.0%;
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                                                                     MALAPE -> MPVPERPAAGI
D).
GGPPGPFLAHTHA -> AQGS
ISOFORM C).
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MISSING (IN ISOFORM C)
MISSING (IN ESPORM C)
MISSING (IN REF. 2).
E -> K (IN REF. 2).
Q -> R (IN REF. 3).
Score 99.5; D
Pred. No. 4;
8; Mismatches
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                                                            AA6A39E0E272727C CRC64;
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Query Match Best Local S Matches 42

Similarity

42;

Conservative

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68;

Indels

27;

Gaps

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Search Job ti	Db	ફ	밁	Ş	용	Ş	
Search completed: June 23, 2003, 15:14:13 Job time : 25 secs	263 SPHQAEPYLSPSPSACTAVQEPSPG 287	126 -PLDKVIILSPGISDATAPAWPPPG 149	212 GEGQEGLPLTGACAGGPGLPAGELYGWAVETTPSPGPQPAALTTGEAAAPE 262	66 GAGEAALPLPGLLFGAPALLGLALVLALVLVGLVSWRRRQRRLRGASSAEAPDGDKDAPE 125	165 GLQAPGPLPAPAGDEGDLLLQAVQQSCLADHLLTASWGADPVPTKAP 211	10 GRDAPAPTPCVPAECFDLLVRHCVACGLLRTPRPKPAGASSPAPRTALQPQESVGA 65	
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